

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed. The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (USDA, 1999) and "Keys to Soil Taxonomy" (USDA, 1998) and in the "Soil Survey Manual" (USDA, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 1996).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units in the Hydric Soil Interpretations table meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1996).

Map units that are made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

These map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Dawson County, Nebraska

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Ad: ALDA LOAM, 0 TO 2 PERCENT SLOPES	ALDA	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
AED: ARENTS, EARTHEN DAM	ARENTS, EARTHEN DAM	Unranked	---	---	---	---	---
AES: SPOIL BANKS	SPOIL BANKS	Unranked	---	---	---	---	---
An: ANSELMO FINE SANDY LOAM, 0 TO 1 PERCENT SLOPES	ANSELMO	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
AnB: ANSELMO FINE SANDY LOAM, 1 TO 3 PERCENT SLOPES	ANSELMO	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
AnC: ANSELMO FINE SANDY LOAM, 3 TO 6 PERCENT SLOPES	ANSELMO	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
AnD: ANSELMO FINE SANDY LOAM, 6 TO 11 PERCENT SLOPES	ANSELMO	No	---	---	---	---	---
Ap: ANSELMO LOAM, 0 TO 1 PERCENT SLOPES	ANSELMO	No	---	---	---	---	---
CoD2: COLY SILT LOAM, 6 TO 11 PERCENT SLOPES, ERODED	COLY	No	---	---	---	---	---
CoE2: COLY SILT LOAM, 11 TO 20 PERCENT SLOPES, ERODED	COLY	No	---	---	---	---	---
CpG: COLY-HOBBS SILT LOAMS, 2 TO 60 PERCENT SLOPES	COLY	No	---	---	---	---	---
	HOBBS	No	---	---	---	---	---
Cr: COZAD FINE SANDY LOAM, 0 TO 1 PERCENT SLOPES	COZAD	No	---	---	---	---	---
	PERCHED WT	Yes	depression	2B3	YES	NO	NO
Cs: COZAD SILT LOAM, 0 TO 1 PERCENT SLOPES	COZAD	No	---	---	---	---	---
	PERCHED WT	Yes	depression	2B3	YES	NO	NO
CsB: COZAD SILT LOAM, 1 TO 3 PERCENT SLOPES	COZAD	No	---	---	---	---	---
	PERCHED WT	Yes	depression	2B3	YES	NO	NO
CsC: COZAD SILT LOAM, 3 TO 6 PERCENT SLOPES	COZAD	No	---	---	---	---	---
CsD2: COZAD SILT LOAM, 6 TO 11 PERCENT SLOPES, ERODED	COZAD	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	flood plain	2B3	YES	NO	NO

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Ct: COZAD SILT LOAM, SALINE-ALKALI, 0 TO 1 PERCENT SLOPES	COZAD	No	---	---	---	---	---
	PERCHED WT	Yes	depression	2B3	YES	NO	NO
Cv: COZAD SILT LOAM, WET SUBSTRATUM, 0 TO 1 PERCENT SLOPES	COZAD	No	---	---	---	---	---
	PERCHED WT	Yes	depression	2B3	YES	NO	NO
CvB: COZAD SILT LOAM, WET SUBSTRATUM, 1 TO 3 PERCENT SLOPES	COZAD	No	---	---	---	---	---
	PERCHED WT	Yes	depression	2B3	YES	NO	NO
Cx: COZAD SILTY CLAY LOAM, 0 TO 1 PERCENT SLOPES	COZAD	No	---	---	---	---	---
CyF: COZAD-HOBBS SILT LOAMS, 2 TO 30 PERCENT SLOPES	COLY	No	---	---	---	---	---
	HOBBS WT AT 0-1 FOOT	No Yes	---	---	---	---	---
		Yes	flood plain	2B3	YES	NO	NO
Em: ELSMERE LOAMY FINE SAND, LOAMY SUBSTRATUM, 0 TO 3 PERCENT SLOPES	ELSMERE	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B2	YES	NO	NO
Es: ELSMERE LOAMY FINE SAND, SALINE-ALKALI, 0 TO 3 PERCENT SLOPES	ELSMERE	No	---	---	---	---	---
	SELIA WT AT 0-1 FOOT	No Yes	---	---	---	---	---
		Yes	swale	2B2	YES	NO	NO
Fm: FILLMORE SILT LOAM, 0 TO 2 PERCENT SLOPES	FILLMORE	Yes	playa	2A	YES	NO	NO
	PONDED SOILS	Yes	playa	2B3,3	YES	NO	YES
Fo: FILLMORE SILT LOAM, DRAINED, 0 TO 2 PERCENT SLOPES	FILLMORE	No	---	---	---	---	---
	FILLMORE, UNDRAINED PONDED SOILS	Yes Yes	playa	2A 2B3,3	YES YES	NO NO	NO YES
Gb: GIBBON LOAM, 0 TO 2 PERCENT SLOPES	GIBBON	No	---	---	---	---	---
	LAWET	Yes	flood plain	2B3	YES	NO	NO
Gn: GOSPER FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES	GOSPER	No	---	---	---	---	---
Go: GOSPER LOAM, 0 TO 2 PERCENT SLOPES	GOSPER	No	---	---	---	---	---
GP: GRAVEL PITS	PITS	Unranked	---	---	---	---	---
Gt: GOSPER LOAM, SALINE- ALKALI, 0 TO 2 PERCENT SLOPES	GOSPER	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO

HYDRIC SOIL INTERPRETATIONS
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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Gu: GOTHENBURG SOILS, 0 TO 2 PERCENT SLOPES	GOTHENBURG	Yes	flood plain	2B3	YES	NO	NO
Ha: HALL SILT LOAM, 0 TO 1 PERCENT SLOPES	HALL	No	---	---	---	---	---
	FILLMORE	Yes	playa	2A	YES	NO	NO
HaB: HALL SILT LOAM, 1 TO 3 PERCENT SLOPES	HALL	No	---	---	---	---	---
	FILLMORE	Yes	playa	2A	YES	NO	NO
Hb: HALL SILT LOAM, TERRACE, 0 TO 1 PERCENT SLOPES	HALL	No	---	---	---	---	---
	FILLMORE	Yes	playa	2A	YES	NO	NO
Hc: HALL SILT LOAM, WET SUBSTRATUM, 0 TO 1 PERCENT SLOPES	HORD	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Hd: HOBBS SILT LOAM, 0 TO 2 PERCENT SLOPES	HOBBS	No	---	---	---	---	---
Ho: HOLDREGE SILT LOAM, 0 TO 1 PERCENT SLOPES	HOLDREGE	No	---	---	---	---	---
	FILLMORE	Yes	playa	2A	YES	NO	NO
HoB: HOLDREGE SILT LOAM, 1 TO 3 PERCENT SLOPES	HOLDREGE	No	---	---	---	---	---
	FILLMORE	Yes	playa	2A	YES	NO	NO
HoC: HOLDREGE SILT LOAM, 3 TO 6 PERCENT SLOPES	HOLDREGE	No	---	---	---	---	---
HoC2: HOLDREGE SILT LOAM, 3 TO 6 PERCENT SLOPES, ERODED	HOLDREGE	No	---	---	---	---	---
HpB: HORD FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES	HORD	No	---	---	---	---	---
Hr: HORD SILT LOAM, 0 TO 1 PERCENT SLOPES	HORD	No	---	---	---	---	---
	FILLMORE	Yes	playa	2A	YES	NO	NO
HrB: HORD SILT LOAM, 1 TO 3 PERCENT SLOPES	HORD	No	---	---	---	---	---
	FILLMORE	Yes	playa	2A	YES	NO	NO
HrC: HORD SILT LOAM, 3 TO 6 PERCENT SLOPES	HORD	No	---	---	---	---	---
Hs: HORD SILT LOAM, WET SUBSTRATUM, 0 TO 1 PERCENT SLOPES	HORD	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Ht: HORD SILTY CLAY LOAM, 0 TO 1 PERCENT SLOPES	HORD	No	---	---	---	---	---
Hx: HORD SILTY CLAY LOAM, WET SUBSTRATUM, 0 TO 1 PERCENT SLOPES	HORD	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
INT: INTERMITTENT WATER	AQUOLLS	Yes	depression, terrace	3,2B3	YES	NO	YES
La: LAWET LOAM, PONDED, 0 TO 2 PERCENT SLOPES	LAWET	Yes	flood plain	2B3	YES	NO	NO
Lb: LAWET SILT LOAM, DRAINED, 0 TO 2 PERCENT SLOPES	LAWET	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Ld: LAWET SILT LOAM, SALINE-ALKALI, 0 TO 2 PERCENT SLOPES	LAWET	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Le: LEX LOAM, 0 TO 2 PERCENT SLOPES	LEX	No	---	---	---	---	---
	LAWET	Yes	flood plain	2B3	YES	NO	NO
Lf: LEX LOAM, SALINE- ALKALI, 0 TO 2 PERCENT SLOPES	LEX	No	---	---	---	---	---
	LAWET	Yes	flood plain	2B3	YES	NO	NO
M-W: MISCELLANEOUS WATER, SEEWAGE LAGOON	MISCELLANEOUS WATER	---	---	---	---	---	---
OvB: OVINA FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES	OVINA	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Pt: PLATTE LOAM, 0 TO 2 PERCENT SLOPES	PLATTE	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B2	YES	NO	NO
Ru: RUSCO SILT LOAM, 0 TO 1 PERCENT SLOPES	RUSCO	No	---	---	---	---	---
	PERCHED WT PONDED SOILS	Yes Yes	depression depression	2B3 2A,3	YES YES	NO NO	NO YES
Sc: SILVER CREEK SILT LOAM, 0 TO 2 PERCENT SLOPES	SILVER CREEK	No	---	---	---	---	---
Sf: SILVER CREEK SILTY CLAY LOAM, 0 TO 2 PERCENT SLOPES	SILVER CREEK	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Sh: SILVER CREEK COMPLEX, 0 TO 2 PERCENT SLOPES	SILVER CREEK	No	---	---	---	---	---
Ube: ULY SILT LOAM, 11 TO 15 PERCENT SLOPES	ULY	No	---	---	---	---	---
UcF: ULY-COLY SILT LOAMS, 15 TO 30 PERCENT SLOPES	ULY	No	---	---	---	---	---
	COLY	No	---	---	---	---	---

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				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Uhd: ULY-HOLDREGE SILT LOAMS, 6 TO 11 PERCENT SLOPES	ULY	No	---	---	---	---	---
	HOLDREGE	No	---	---	---	---	---
Umd2: ULY-HOLDREGE-COLY SILT LOAMS, 6 TO 11 PERCENT SLOPES, ERODED	HOLDREGE	No	---	---	---	---	---
	ULY	No	---	---	---	---	---
	COLY	No	---	---	---	---	---
VaB: VALENTINE LOAMY FINE SAND, 0 TO 3 PERCENT SLOPES	VALENTINE	No	---	---	---	---	---
VaC: VALENTINE LOAMY FINE SAND, 3 TO 6 PERCENT SLOPES	VALENTINE	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B2	YES	NO	NO
VaE: VALENTINE LOAMY FINE SAND, ROLLING	VALENTINE	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B2	YES	NO	NO
W: WATER	WATER	Unranked	---	---	---	---	---
Wa: WANN FINE SANDY LOAM, SALINE-ALKALI, 0 TO 2 PERCENT SLOPES	WANN	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Wb: WANN LOAM, 0 TO 2 PERCENT SLOPES	WANN	No	---	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Wo: WOOD RIVER SILT LOAM, 0 TO 1 PERCENT SLOPES	WOOD RIVER	No	---	---	---	---	---
Wr: WOOD RIVER COMPLEX, 0 TO 2 PERCENT SLOPES	WOOD RIVER	No	---	---	---	---	---
	GAYVILLE	No	---	---	---	---	---
	PERCHED WT	Yes	depression	2A	YES	NO	NO

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria

FOOTNOTE: There may be small areas of included soils or miscellaneous areas that are significant to use and management of the soil; yet are too small to delineate on the soil map at the map's original scale. These may be designated as spot symbols and are defined in the published Soil Survey Report or the USDA-NRCS Technical Guide, Part II.

Areas mapped as water or any map unit that contains one of the following conventional symbols is considered a hydric soil map unit: marshes or swamps; wet spots; depressions; streams, lakes and ponds.

1. All Histosols except Folists, or
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Aquisalids, Pachic subgroups, or Cumulic subgroups that are:
 - a. Somewhat poorly drained with a water table equal to 0.0 foot (ft) from the surface during the growing season, or
 - b. poorly drained or very poorly drained and have either:
 - (1) water table equal to 0.0 ft during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches (in),
or for other soils
 - (2) water table at less than or equal to 0.5 ft from the surface during the growing season if permeability is equal to or greater than 6.0 in/hour (h) in all layers within 20 in, or
 - (3) water table at less than or equal to 1.0 ft from the surface during the growing season if permeability is less than 6.0 in/h in any layer within 20 in, or
3. Soils that are frequently ponded for long duration or very long duration during the growing season, or
4. Soils that are frequently flooded for long duration or very long duration during the growing season.